

SUPPLEMENT

**Table S1.** *Escherichia coli* strains and plasmids used in the work

Strain or plasmid	Genotype or characteristic	Reference or source
Strains		
W3110	$F^- \lambda^- rpoS(Am) rph-1 Inv(rrnD-rrnE)$	[1]
DY330	W3110 $\Delta lacU169 gal490 pgl\Delta 8 \lambda cI857$ $\Delta(cro-bioA)$	[2]
XL1-Blue	$recA1 endA1 gyrA96 thi-1 hsdR17 supE44$ $relA1 lac [F' proAB lacIqZ\Delta M15 Tn10$ (Tet <sup>R</sup> )]	Stratagene
KNB800	W3110 $\Delta rplY::cat$	[3]
MS15	DY330 $rplY-1::bla$ (L25 wild-type)	this work
MS20	DY330 $rplY-2::bla$ (L25 Y31A)	this work
MS21	DY330 $rplY-3::bla$ (L25 H88F)	this work
MD6	DY330 $rplY-4::bla$ (L25 S17L/Y31L)	this work
MD7	DY330 $rplY-5::bla$ (L25 S17L/H88F)	this work
MD8	DY330 $rplY-6::bla$ (L25 S17L/I29F/D90Y)	this work
MD9	DY330 $rplY-7::bla$ (L25 S17L/Y31L/H88F)	this work
MS23	W3110 $rplY-1::bla$	this work
MS25	W3110 $rplY-2::bla$	this work
MS26	W3110 $rplY-3::bla$	this work
MD10	W3110 $rplY-4::bla$	this work
MD11	W3110 $rplY-5::bla$	this work
MD12	W3110 $rplY-6::bla$	this work
MD13	W3110 $rplY-7::bla$	this work
Plasmids		
blank pCR-blunt	cloning vector Km <sup>R</sup> Zeo <sup>R</sup> pUCori Plac lacZ $\alpha$	[3]
PKAB101	pCR-blunt/L25 wild-type	[3]
PKAB119	pCR-blunt/L25 Y31A	[4]
PKAB129	pCR-blunt/L25 H88F	[4]
pRP6	pCR-blunt/L25 S17L	this work
pRP7	pCR-blunt/L25 S17L/I29F	this work
pRP8	pCR-blunt/L25 S17L/Y31L	this work
pRP9	pCR-blunt/L25 S17L/H88F	this work
pRP10	pCR-blunt/L25 S17L/I29F/D90Y	this work
pRP11	pCR-blunt/L25 S17L/Y31L/H88F	this work
pBR322	cloning vector Ap <sup>R</sup> Tc <sup>R</sup>	[5]
pUC18	cloning vector Ap <sup>R</sup> Plac lacZ $\alpha$ pMB1 ori	US Biological
pUC18/Eco5Sfr	fragment of <i>E. coli</i> 5S rRNA gene cloned into pUC18	this work

**Table S2.** Oligonucleotides used in this work

Name	Nucleotide sequence (5' → 3')
L25-S17L-F	GTAAGGGTGCCTACGCCGCCTGC
L25-S17L-R	GCAGGCGCGTAACGCACCCTTAC
L25-I29F-F	CAAGTTCCCGCATTATCTACGGTGGC
L25-I29F-R	GCCACCGTAGATAAAATGCCGGAACTTG
L25-D90Y-F	GCAGCACATCTATTCGTTCGCG
L25-D90Y-R	CGCGAACGAAATAGATGTGCTGC
L25-Y31L-F	GGCAATCATCCTGGGTGGCAAAG
L25-Y31L-R	CTTGCCACCCAGGATGATTGCC
L25-H88F-F	CCGAAGCTGCAGTCATCGACTTC
L25-H88F-R	GAAGTCGATGAACTGGAGCTTCGG
AK22	GGTCGCCTGTAGCAGGATTAATTAAAGAGAGAAAGAAATGTTACTAT CAACGCAGAAG
AK23	AAGCATTATCAGGGTTATTGTCTCATGAGCGGACTTAAGCGCGAAC GAAGTCGATG
rplY-D90Y-rec-R	AAGCATTATCAGGGTTATTGTCTCATGAGCGGACTTAAGCGCGAAC GAAATAGATGTGC
AK21	CCCGCCGGAGCGGGTTTTACAACCTATTCAATTACCAATTGCTT AATCAGTGAGGCACC
rplY-check-F	GCAGATCACTTACCTGTTGC
rplY-check-R	GTTCACAACTTATTCAAGC
Fr5S-F	GGGAATTCCATATGAAATACGACTCACTATAGCCATGGTAGTGTGGG
Fr5S-R	CTAGTCTAGACCTACTCTCGCATGGGGAGACC
5S-biotin*	GCGCAGCGAG

\* 3'-biotinylated RNA oligonucleotide.

## REFERENCES

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